(f) nucleotide 1289 wherein N is A;
(g) nucleotide 1308 wherein N is C;
(h) nucleotide 1784 wherein N is A;
or the complement thereof.

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172. (amended) The isolated nucleic acid probe of claim 171 comprising at least two of:
(a) nucleotide 120 wherein N is C;
(b) nucleotide 464 wherein N is G;
(c) nucleotide 519 wherein N is T;
(d) nucleotide 668 wherein N is T;
(e) nucleotide 1059 wherein N is C;
(f) nucleotide 1289 wherein N is A;
(g) nucleotide 1308 wherein N is C;
(h) nucleotide 1784 wherein N is A;
or the complement thereof.

173. (reiterated) The probe of claim 171 comprising no more than 500 contiguous nucleotides of SEQ ID NO:15.

174. (reiterated) The probe of claim 171 comprising no more than 200 contiguous nucleotides of SEQ ID NO:15.

175. (reiterated) The probe of claim 171 comprising no more than 100 contiguous nucleotides of SEQ ID NO:15.

176. (reiterated) The probe of claim 171 comprising no more than 50 contiguous nucleotides of SEQ ID NO:15.

177. (reiterated) The probe claim 171 comprising DNA.

178. (reiterated) The probe of claim 171 comprising a peptide nucleic acid.

179. (reiterated) The probe of claim 171 further comprising a detectable label.

180. (reiterated) The probe of claim 179 wherein the detectable label is a fluorescent label.

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181. (amended) A method comprising:
(a) providing a sample comprising nucleic acid molecules present in a biological sample obtained from a patient;
(b) contacting the sample with a probe comprising at least 15 contiguous nucleotides of the nucleotide sequence of SEQ ID NO:15 (methelenetetrahydrofolate reductase), the probe comprising at least one of:

(i) nucleotide 120 wherein N is C;
(ii) nucleotide 464 wherein N is G;
(iii) nucleotide 519 wherein N is T;
(iv) nucleotide 668 wherein N is T;
(v) nucleotide 1059 wherein N is C;
(vi) nucleotide 1289 wherein N is A;
(vii) nucleotide 1308 wherein N is C;
(vii) nucleotide 1784 wherein N is A;

or the complement thereof; and

(c) determining if the sample comprises a nucleic acid molecule that hybridizes to the probe.